REMARKS

Status of the claims

Claims 1 and 3-36 were pending in the present application. By virtue of this response, claims 4, 10, 22, 28, and 35 have been canceled, claims 1, 3, 5-7, 11-19, 21, 23, 25, 27, 30-31, 33-34, and 36 have been amended, and new claims 37-42 have been added. Accordingly, claims 1, 3, 5-9, 11-21, 23-27, 29-34, and 36-42 are currently under consideration.

Support for the claim amendments and new claims may be found in the specification. Support for the amendment to claim 1 is supported, for example, on page 9, lines 22-23, page 9, line 32, page 12, lines 23-24 and page 13, lines 7-14. The amendment to claim 3 is supported, for example, on page 9, lines 24-25. The amendment to claim 5 is supported, for example, on page 16, lines 33-33. The amendment to claim 7 is supported, for example, in Table 11. The amendment to claim 12 is supported, for example, on page 9, lines 24-25, page 12, lines 23-24, and page 13, lines 7-14. The amendment to claim 15 is supported, for example, on page 9, line 32. The amendment to claim 17 is supported, for example, on page 9, lines 24-25 and page 13, lines 7-14. The amendment to claim 21 is supported, for example, on page 9, line 32 and page 13, lines 7-14. The amendment to claim 23 is supported, for example on page 9, lines 24-25. The amendment to claim 30 is supported, for example, on page 9, lines 22-23, page 9, lines 24-25, and page 13, lines 7-14. The amendment to claim 34 is supported, for example, on page 9, line 32 and page 13, lines 7-14. The amendment to claim 36 is supported, for example, on page 9, lines 22-25 and page 13, lines 7-14. New claims 37-42 are supported, for example, on page 13, line 8.

With respect to any claim amendments or cancellations, Applicants have not dedicated to the public or abandoned any unclaimed subject matter and moreover have not acquiesced to any rejections and/or objections made by the Patent Office. Applicants expressly reserve the right to pursue prosecution of any presently excluded subject matter or claim embodiments in one or more future continuation and/or divisional application(s).

Rejection under 35 U.S.C. §112, second paragraph

Claims 3, 4, 12-20, 23, 30, and 36 are rejected under 35 U.S.C. §112, second paragraph,

as allegedly indefinite due to lack of units in connection with the molecular weight values recited in the claims. Applicants respectfully traverse this rejection.

Applicants respectfully note that the term "molecular weight" is well known to those of skill in the art to refer to the sum of the relative weights of atoms in a molecule when compared to a reference weight of 12 for ^{12}C. "Molecular weight" is defined in the CRC Handbook of Chemistry and Physics, 59th Ed., page F-112, as "[t]he sum of the atomic weights of all the atoms in a molecule." On page F-94 of this reference, "atomic weight" is defined as "the relative weight of the atom on the basis of $^{12}C \equiv 12$." Since molecular weight is a *relative* measure, no units (*e.g.*, Daltons) are necessary.

In fact, several of the references cited by the Examiner in the present Office Action recite molecular weights *without units*. U.S. Patent No. 5,068,099, cited in a 35 U.S.C. §102(b) rejection, recites a polymer with "a weight average molecular weight of at least 100,000" in claims 1, 8, 15, and 17. Thus, the Office found the claims of this issued U.S. patent to be definite with respect to describing the molecular weight of a claimed polymer *without units*. The Merck Index, Tenth Edition, page 1444, entry 9868, cited in 35 U.S.C. §102(b) rejections *as disclosing the molecular weight of xanthan gums*, describes xanthan gum as having a "Mol wt > 10^6." The Examiner cited this reference that does not use molecular weight units as anticipating Applicants' claimed molecular weight range. Indeed, the Examiner stated in the Office Action that "[t]he disclosure by The Merck Index is a supporting reference and properly used in a rejection under of U.S.C. 102 since it *describes the molecular weight of xanthan gums* in the range of 10^7." Office Action, page 5, emphasis added. Ferguson (1992) *J. Non-Newtonian Fluid Mech.* 44:37-54, cited by the Examiner in a rejection under 35 U.S.C. §103(a), describes polymer molecular weights *without units* throughout the reference.

Applicants further note that U.S. Patent Nos. 7,211,122, 6,893,660, and 6,802,673 all contain claims that recite molecular weights for polyethylene oxide polymers *without units*. Thus, the Office found these claims to satisfy the requirements of 35 U.S.C. §112, second paragraph, without recitation of units for molecular weight.

In view of the foregoing, Applicants respectfully request reconsideration and withdrawal of the rejection under 35 U.S.C. §112, second paragraph.

Rejections under 35 U.S.C. §102(b)

Claims 1, 3, 4, 7, 9, 12, 15, and 16 are rejected under 35 U.S.C. §102(b) as allegedly anticipated by Sramek, U.S. Patent No. 5,068,099 ("Sramek"). Applicants respectfully traverse this rejection.

The Examiner states that the term comprising "allows for the inclusion of components that are not named in the claims" and that "the co-polymers of polyacrylamides taught by Sramek meet the open language of the instant claims." Office Action, page 3. Applicants respectfully disagree that the claims presented in the response filed on December 6, 2006 contained open language with regard to the polymer component of the claimed personal care or cleaning products or the claimed methods for reducing aerosol generation. Independent claims 1and 12 clearly stated that the high molecular weight polymer is *selected from* polyethylene oxide, polyacrylamide, substituted acrylamides, and gums. The Markush language "selected from" excludes other polymers, such as co-polymers of polyacrylamides, from the claims.

The claims have been amended herein to recite high molecular weight polyethylene oxide. Since Sramek does not teach incorporation of polyethylene oxide into a personal care or cleaning product, or a composition in which a reduction in misting is imparted by inclusion of polyethylene oxide, this reference does not anticipate the claimed invention. Sramek also does not teach inclusion of an enzyme and an enzyme protecting agent in the compositions taught therein, as recited in the claims as presented herein, and therefore, the present claims are novel over this reference.

In view of the foregoing, Applicants respectfully request reconsideration and withdrawal of the rejection under 35 U.S.C. §102(b).

Claims 1, 3, 4, 6-9, 12, and 15 are rejected under 35 U.S.C. §102(b) as allegedly anticipated by Lentsch et al., U.S. Patent No. 5,364,551 ("Lentsch") in view of The Merck Index (1983). Applicants respectfully traverse this rejection.

The Examiner states that Lentsch discloses a spray-on cleaner with reduced misting, containing polyacrylamide thickeners or xanthan compositions. The Merck Index is cited as

providing a molecular weight for the xanthan gum products described in Lentsch.

The claims as amended herein recite personal care and cleaning compositions containing a polyethylene oxide polymer component. The cleaning compositions taught by Lentsch do not include polyethylene oxide as claimed. Lentsch does not teach or suggest such a composition, in particular a composition wherein polyethylene oxide serves as an anti-misting agent, as recited in the present claims. Lentsch also does not teach inclusion of an enzyme and an enzyme protecting agent in the compositions taught therein, as recited in the present claims. Therefore, Lentsch does not anticipate the claimed invention.

In view of the foregoing, Applicants respectfully request reconsideration and withdrawal of the rejection under 35 U.S.C. §102(b).

Claims 1, 3, 4, 6-17, 19-22, 26-30, and 33 are rejected under 35 U.S.C. §102(b) as allegedly anticipated by Sidoti et al., GB 2339,794 ("Sidoti") in view of The Merck Index (1983) and Lentsch. Applicants respectfully traverse this rejection.

The Examiner states that Sidoti discloses compositions for spot cleaning of textiles comprising a surfactant, a solvent, an enzyme and a xanthan gum as a thickening agent. The Merck Index is cited as providing a molecular weight for the xanthan gum products described in Sidoti, and Lentsch is cited as allegedly disclosing an inherent ability of xanthan gums to reduce misting.

The claims as amended herein limit recite personal care and cleaning compositions containing a polyethylene oxide polymer component. The cleaning compositions taught by Sidoti do not include polyethylene oxide as claimed. Sidoti does not teach or suggest such a composition, in particular a composition wherein polyethylene oxide serves as an anti-misting agent. Therefore, Sidoti does not anticipate the claimed invention.

In view of the foregoing, Applicants respectfully request reconsideration and withdrawal of the rejection under 35 U.S.C. §102(b).

Rejection under 35 U.S.C. §102(e)

Claims 1, 3-, 7-18, 20-25, 28-30, 33, and 36 are rejected under 35 U.S.C. §102(e) as

allegedly anticipated by Elliott et al., U.S. Application No. 2003/0175232 ("Elliott"). Applicants respectfully traverse this rejection.

Elliott discloses enzyme-containing personal care products for use on the skin. The compositions disclosed by Elliott include a polyhydric alcohol such as propylene glycol, and may include a polymeric thickener such as polyacrylamide or a gum.

The claims as amended herein recite personal care and cleaning compositions containing a polyethylene oxide polymer component. The personal care compositions taught by Elliott do not include polyethylene oxide as claimed, in particular a composition wherein polyethylene oxide serves to reduce misting as required by the present claims. Therefore, Elliott does not anticipate the claimed invention.

In view of the foregoing, Applicants respectfully request reconsideration and withdrawal of the rejection under 35 U.S.C. §102(e).

Rejections under 35 U.S.C. §103(a)

Claims 31 and 32 are rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Elliott or Sidoti in view of Cho et al., U.S. Patent No. 6,835,703 ("Cho"). Applicants respectfully traverse this rejection.

Cho is cited as allegedly teaching dispersal of a polymer in a water miscible nonsolvent, as recited in claim 31, and combining a polymer and an enzyme at 35° C, as recited in claim 32. The Examiner states that "Cho advises that polymers that comprise thickeners should be dispersed in a non-aqueous ingredient prior to combining it with an enzyme to ensure better dispersal and mixing with the enzyme" and that "the mixing of the composition can be done at a temperature of about 30 degrees or less." The Examiner interprets "about 35 degrees C" in claim 32 as "±5 degrees." Office Action, page 7.

As discussed above, neither Elliott nor Sidoti teaches or suggests a cleaning or personal care composition including high molecular weight polyethylene oxide as an anti-misting agent as claimed. Cho does not cure this defect. Cho is concerned with production of non-alkaline automatic dishwasher detergents. Nowhere does Cho teach or suggest a reduced aerosol generating composition with high molecular weight polyethylene oxide included as an anti-

misting agent, as claimed. Further, none of the compositions disclosed in Cho include high molecular weight polyethylene oxide.

Cho does not teach or suggest dispersing high molecular weight polyethylene oxide in a water miscible nonsolvent prior to combining the polyethylene oxide with an enzyme, as recited in claim 31. Cho also does not teach or suggest combining high molecular weight polyethylene oxide with an enzyme and an enzyme protecting agent at about 35°C, as recited in claim 32. Elliott and Sidoti also do not teach or suggest these claim elements.

Thus, the cited combination of references, Elliott, Sidoti, and Cho, does not teach or suggest all of the elements of the claimed invention, as required for an obviousness rejection.

In view of the foregoing, Applicants respectfully request reconsideration and withdrawal of the rejection under 35 U.S.C. §103(a).

Claims 34 and 35 are rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Sidoti in view of Ferguson et al. (1992) *Journal of Non-Newtonian Fluid Mechanics* 44:37-54 ("Ferguson"). Claim 34 is rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Lentsch in view of Ferguson. Applicants respectfully traverse these rejections.

The Examiner states that neither Sidoti nor Lentsch teaches the reduction of misting in an aerosol cleaner by using polyethylene oxide (PEO) as a thickener. The Examiner further states that Ferguson teaches that high molecular weight polymers increase viscosity and diameter of droplets in aerosol compositions and that PEO is one such high molecular weight polymer that affects viscosity of aerosol compositions. The Examiner asserts that it would have been obvious to one of ordinary skill in the art and a matter of routine selection to substitute PEO for the xanthan gum taught in Sidoti or Lentsch. Applicants disagree with the Examiner's analysis and submit that selection of PEO to reduce misting in an enzyme-containing composition would not have been obvious.

Claim 34 has been amended herein to include an enzyme protecting agent. Claim 35 has been canceled, rendering the rejection moot with respect to claim 35. Neither Sidoti, Lentsch, nor Ferguson discloses or suggests a composition comprising an enzyme, high molecular weight PEO, and an enzyme protecting agent as recited in claim 34. Thus, this combination fails to teach or suggest all of the limitations of claim 34, as required for an obviousness rejection.

Further, Ferguson teaches that with PEO, as the molecular weight increases, the particle size distribution becomes multimodal, which can be explained by a phase change in the elongating fluid. Abstract; pages 45-50. Ferguson teaches that as the molecular weight of PEO increases, the curve of mass median diameter (MMD) vs. viscosity becomes anomalous. Page 45; Figure 8. The curve can be resolved into at least three log-normal distributions, suggesting a phase change in aqueous solution when undergoing elongation. Pages 45 and 49. The three particle size distributions are shown in Figure 11 of Ferguson. Curve 1 is similar to a curve for pure water, curve 3 suggests the presence of associated or complexed PEO polymer chains, and curve 2 exhibits an average particle size expected for a lower molecular weight PEO. Pages 45 and 48.

Given the anomalous and complex behavior of high molecular weight PEO with respect to particle size distribution, Ferguson would not suggest to person of skill in the art that high molecular weight PEO would be a good choice as an anti-misting agent. Ferguson actually teaches away from use of high molecular weight PEO for this purpose. A skilled artisan would have no expectation of predictable success in formulating a reduced aerosol composition as claimed based on the teachings of Ferguson, which teaches that high molecular weight PEO does not have an appropriate particle size distribution for this purpose. Further, the claimed compositions also include an enzyme and an enzyme protecting agent, and Ferguson teaches nothing about the anti-misting behavior of PEO in the presence of these other components.

In view of the foregoing, Applicants respectfully request reconsideration and withdrawal of the rejection under 35 U.S.C. §103(a).

CONCLUSION

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue. If it is determined that a telephone conference would expedite the prosecution of this application, the Examiner is invited to telephone the undersigned at the number given below.

In the event the U.S. Patent and Trademark Office determines that an extension and/or other relief is required, Applicants petition for any required relief including extensions of time and authorize the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 07-1048, referencing Docket No. GC761-6. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Respectfully submitted,

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